VMware vCenter Configuration Manager Foundation Checker
User's Guide
vCenter Configuration Manager 5.4
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About This Book

This guide, VCM Foundation Checker User’s Guide, describes the process of installing, running, and analyzing the prerequisite checks performed by VMware vCenter Configuration Manager (VCM) Foundation Checker. These checks are required before installing the VCM application. This document contains the following information:

- Foundation Checker overview
- Installing Foundation Checker
- Running Foundation Checker
- Reviewing the Foundation Checker system results

VCM Foundation Checker User’s Guide covers VCM 5.4 and Foundation Checker 5.4.

Intended Audience

This document contains information intended for system administrators who are experienced Windows system administrators who are familiar with installing VCM.

To use the information in this guide effectively, you must have a basic understanding of how to configure network resources, install software, and administer operating systems. You also need to fully understand your network’s topology and resource naming conventions.

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VMware VCM Documentation

Technical Support and Education Resources

The following technical support resources are available to you. To access the current version of this book and other books, go to http://www.vmware.com/support/pubs.

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Introduction to Foundation Checker

The Foundation Checker is a tool used to verify that the machine designated as a VCM Collector meets all the prerequisites necessary for installing VCM. The prerequisites are described in the VCM Hardware and Software Requirements Guide.

The Foundation Checker is comprised of a series of system checks run on the Collector machine. If the checks run without error, you can begin installing VCM. If the checks identify missing components or incorrect configurations, you are instructed where to verify the component or configuration, and how to remedy the errors.

You will most commonly encounter the Foundation Checker as part of the Installation Manager. If you are using this manual in the context of installing VCM, see "Reviewing the Foundation Checker System Checks" on page 13 for information about evaluating the results. However, you can run the Foundation Checker as a standalone application. The most common scenarios for installing and running the standalone application are as follows:

- If you are checking a designated Collector machine in advance of VCM installation.
- If you are adding a Collector to your VCM configuration and want to check the new machine in advance of installation.

Chapter 2 and Chapter 3 of this manual provides information about installing and running the standalone version of the Foundation Checker.
Installing Foundation Checker

The Foundation Checker is run as part of the VCM Installation Manager application. However, you can install a standalone version on your designated Collector machine to verify a VCM-ready configuration in advance of the full VCM installation.

To use the Foundation Checker as a standalone application, you can install the Foundation Checker tool using the Installation Manager or download the Foundation Checker application from the Download VMware vCenter Configuration Manager. Do not install a standalone version of the Foundation Checker on a machine that is already running VCM.

**NOTE** If you have downloaded and run Foundation Checker independent from the Installation Manager, see "Running the Foundation Checker" on page 11 for instructions. Take care to use the version of the Foundation Checker that supports the specific version of VCM you are installing.

**Installing the Standalone Version of the Foundation Checker**

1. Insert the installation CD into the machine on which you are installing the Foundation Checker. The Installation screen appears.

   **NOTE** If the Installation screen does not appear automatically or if you are installing from a network location, navigate to the root directory on the CD or share and double-click setup.exe.

2. Click Run Installation Manager. The Introduction page appears.

3. Click Next. The License Agreement appears.

4. Select I accept the terms in the license agreement, and also indicate that you are an authorized agent or end user and that you have read the terms of the agreement.

5. Click Next. After identifying any components already installed on the machine, the Select Installation Type page appears.

6. To install only the Foundation Checker, clear all the check boxes and then select Foundation Checker in the Tools list.

7. Click Next. The Gathering System Information page appears. The Installation Manager verifies that the machine has sufficient resources to support the Foundation Checker.

8. Click Next. The Configure Components page appears.
9. Use the default location or to change the location where the Foundation Checker tool is to be installed, type a new path in the text box or click Change to browse to the new location.

10. Click Next. The Install Components page appears.

11. Click Install.

12. When you are notified that the process is completed, click Finish. The application is installed.

**Downloading the Standalone Foundation Checker**

The standalone Foundation Checker is accessible from the VMware vCenter Configuration Manager Tools download from the VMware Web site.

**IMPORTANT** You must run the version of the Foundation Checker associated with the version of VCM you are planning to install.

**Procedure**

1. Log on to the Download VMware vCenter Configuration Manager at:
   http://downloads.vmware.com/d/info/datacenter_downloads/vmware_vcenter_configuration_manager/5_0

2. Select the Drivers & Tools tab, and then select VMware vCenter Configuration Manager Tools. The download includes multiple tools. Click Show Details to view a summary of the content of the components in the download.

3. To download the standalone Foundation Checker tool, click Download, and then log into the portal. A summary of the download options appears. Select Use Download Manager, and then click the Foundation Checker executable. Create a new folder, place the downloaded executable in the new folder, and then double-click the executable to self-extract the files into the new folder. If the file does not self-extract and run, unzip the downloaded file.

4. Open a command prompt and browse to the location of the FoundationChecker.console.exe. See "Running the Foundation Checker" on page 11 for more information.
Running the Foundation Checker

After the Foundation Checker has been downloaded and installed, you can run it on the machine to be validated.

Procedure

1. Open a command prompt window.

2. At the command prompt, go to the directory where the VCM Foundation Checker is installed. For example, C:\Program Files (x86)\VMware\VCM\Tools\FoundationChecker. Or, if you are using the downloaded and unzipped files from the Download VMware vCenter Configuration Manager Web site, access the directory where the unzipped files reside.

3. Enter FoundationChecker.console.exe -v -dispxform. The -v command directs the application to run in verbose mode, displaying the status of the system checks as they run. The -dispxform command launches the Foundation Checker Results page, which provides information about any changes you may need to make to prepare your machine for an installation of VCM. See "Evaluating the Results" on page 14 for more information.

Command Prompt Parameters

The following options are available for use with the Foundation Checker.

Table 3-1. Foundation Checker Command Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-help</td>
<td>Use this run-time parameter to display a complete list of available parameters.</td>
</tr>
<tr>
<td>-v</td>
<td>Use this parameter to run the application in verbose mode. All application details are presented while system checks are performed.</td>
</tr>
<tr>
<td>-dispxform</td>
<td>Use this parameter to display the HTML page that presents the results of the checks after the Foundation Checker has run.</td>
</tr>
<tr>
<td>-cat</td>
<td>Use this parameter to check a particular category of checks. A list of system check categories can be found in the Categories.xml file in the Datafiles\Input directory where you installed Foundation Checker.</td>
</tr>
<tr>
<td>-outputfile</td>
<td>Use this parameter with an output file name to output the results to a file. An example parameter is -outputfile c:\Program Files (x86)\VMware\VCM\Tools\FoundationChecker\results.txt. A .txt file is created in the folder where Foundation Checker is installed. This parameter is identical to the -so parameter.</td>
</tr>
<tr>
<td>-so</td>
<td>Use this parameter with an output file name to output the results to a file. An example parameter is -so c:\Program Files (x86)\VMware\VCM\Tools\FoundationChecker\results.txt. A .txt file is</td>
</tr>
</tbody>
</table>
created in the folder where Foundation Checker is installed. This parameter is identical to the `-outputfile` parameter.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-xformresult &lt;filename&gt;</td>
<td>Changes the name of the results .xsl file. Defaults to ViewFCResults.xsl if not provided. The output file will be located in the Datafiles\Output directory where you installed the application.</td>
</tr>
<tr>
<td>-inputfile</td>
<td>Use this parameter to specify a custom input file to check the machine. As part of the Customer Support process, VMware may provide a custom input file.</td>
</tr>
<tr>
<td>-configfile &lt;filename&gt;</td>
<td>Changes the name of the config XML file. Defaults to Config.xml if not provided.</td>
</tr>
<tr>
<td>-indir</td>
<td>Use this parameter to specify the root directory for data input.</td>
</tr>
<tr>
<td>-outdir</td>
<td>Use this parameter to specify the output directory for data.</td>
</tr>
<tr>
<td>-mach</td>
<td>Use this parameter to specify the name of the machine on which you want to run the application.</td>
</tr>
<tr>
<td>-debug</td>
<td>Use this parameter to provide a larger list of debug options from running Foundation Checker. The output file is located in the Datafiles\Output directory where you installed Foundation Checker.</td>
</tr>
</tbody>
</table>
To ensure a successful VCM installation, the Foundation Checker performs a series of system checks to verify the existence of various applications and system prerequisites.

**Components**

The system checks evaluate the machine for the following component prerequisites.

- Operating System
- SQL Server
- .NET Framework
- Internet Information Services
- SQL Server Reporting Services
- Internet Explorer
- Windows Data Access Components (WDAC)
- SQL XML

**Displayed Information**

The displayed information includes:

- **Component**: System check name.
- **Status**: Severity level (OK, Warning, or Error).
  - **OK**: Indicates the check was successful. No further action is required.
  - **Warning**: Indicates that a non-mandatory check has failed. VCM may not install or, if installed, it may not run optimally.
  - **Error**: Indicates that a required check has failed and VCM will not install.
- **Problem**: Describes the problem the Foundation Checker identified during the assessment.
- **Fix**: Describes the remediation steps required to fix the problem. This field also contains a link to a Help topic, which describes how to remedy the problem.
- **Message**: Describes the expected values for each system check.
Evaluating the Results

After running the Foundation Checker, the system check results are saved as an HTML file. The HTML file is automatically displayed at the end of the system check process when the Foundation Checker is run with the `-dispform` parameter. You can also view the results HTML file using the following steps.

**Procedure**

1. Open the `FCResult.htm` file. The default location for the file is the `Datafiles\Output` directory where you installed the Foundation Checker. The Foundation Checker Results page appears. Errors and exceptions are displayed as shown.

   ![Foundation Checker Results](image)

   An exception indicates that a system component was inaccessible. An error indicates that information was gathered but is not the information that is expected.

2. Click any of the links **OK**, **Error**, or **Warning** links to view more information about the displayed system check for each component, and then select the **Click here** link for information to correct any errors or warnings.

   **NOTE** VMware recommends that you address all **Errors** and review all **Warnings**. Warnings provide valuable information regarding configuration settings that may impact VCM performance.
Other Troubleshooting Options

Additional troubleshooting options are as follows.

Table 4-1. Other Troubleshooting Options

<table>
<thead>
<tr>
<th>Problem</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>After running the Foundation Checker, the results file displays a large number of errors.</td>
<td>Carefully review and apply the configuration settings provided in the <em>Hardware and Software Requirements Guide</em>; see the chapter on <em>Software and Operating System Requirements – Collector Machines</em>. Run the Foundation Checker again.</td>
</tr>
<tr>
<td>I receive errors when I run the Foundation Checker on a machine that has previously run the Foundation Checker without errors.</td>
<td>Reboot the machine and run the Foundation Checker again.</td>
</tr>
</tbody>
</table>

Escalating Issues

If the steps provided to resolve the system check failures do not resolve the warnings or errors, contact VMware Customer Support. Be prepared to provide the content of the following folders.

- FoundationChecker
- _csi_installation

These folders are located in the Documents and Settings temporary folder of the user who installed the application, located under `C:\Documents and Settings\Users\<user>\AppData\Local\Temp`, or use `%Temp%`.

The VMware Customer Support team will use these files to evaluate your system check errors.